

Matching of daily use rubber products with latex fruit syndrome in Japanese nursing university students

Emi Kajiwara¹⁾, Hidechika Iino¹⁾, Satoko Ono²⁾

1) Faculty of Nursing, Fukuoka Nursing College (Formerly Seinan Jo Gakuin University)

2) Department of Nursing, Faculty of Kawasaki University of Medical Welfare

【Background】

We are studying latex allergies (LA) prevention in nursing education at Japanese universities. Our findings found that some nursing students had allergies to rubber products. We examined the matching between allergic symptoms and latex fruit syndrome for rubber products used daily from the survey results of nursing students.

【Purpose】

The purpose of this study is to clarify matching between rubber products (gloves, bands, hair bands, balloons) used routinely by nursing students and latex related fruits (Kiwifruit, banana, chestnut, avocado), a risk factor for LA.

【Method】

We performed a questionnaire to 611 Japanese nursing university students. The data were analyzed by descriptive statistics.

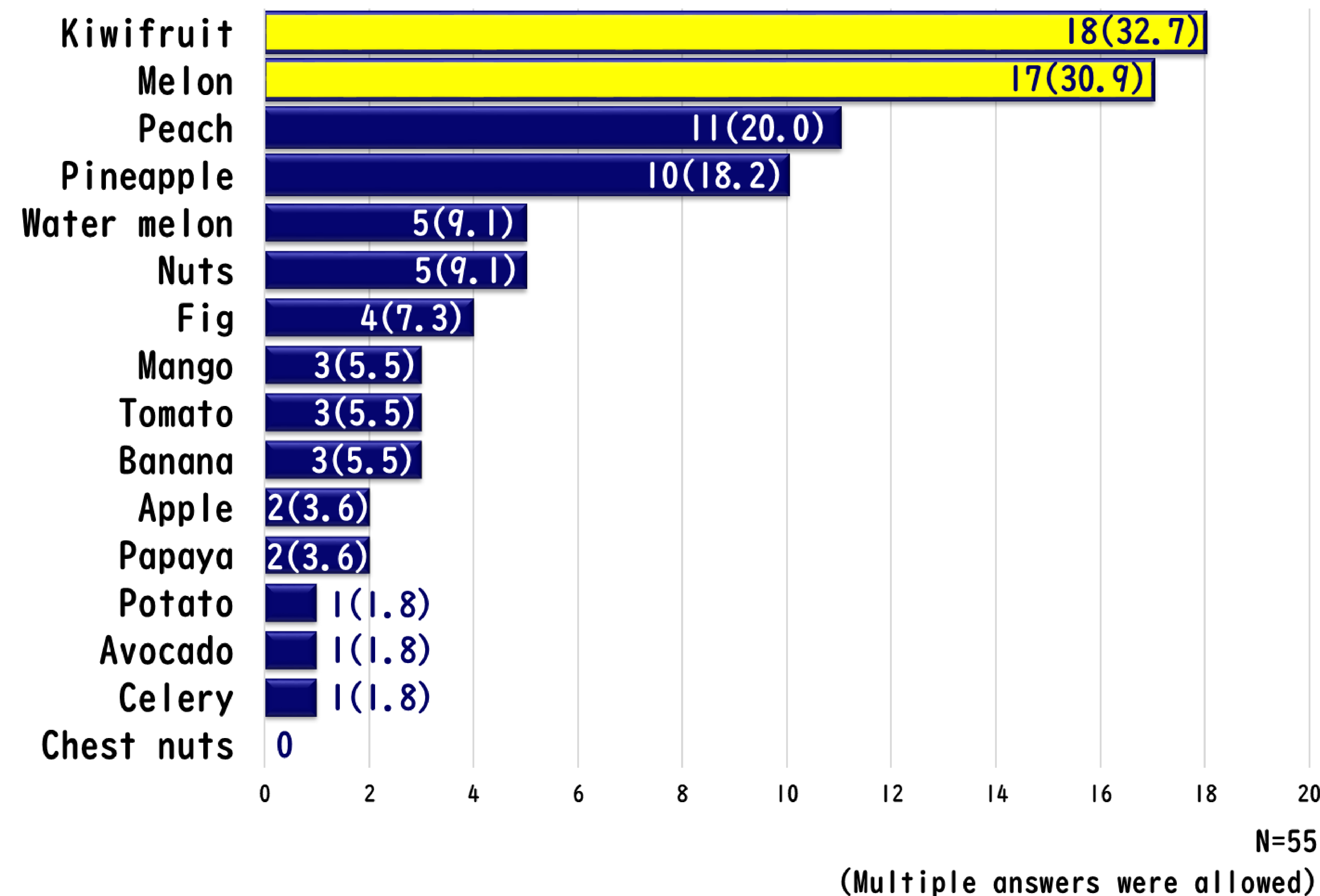


Fig1. Oral allergic symptoms to fruits and vegetables

【Results】

All the respondents were female students, who were 19.1 years old. 55/611 (9%) of students experienced symptoms of oral allergy. Most students had a preventive action to avoid the fruits and vegetables without consulting with a doctor. Most students had only one type of fruit and vegetables. However, 5/611 (0.8%) of students had symptoms of more than five fruits and vegetables. For avocado, chestnut, banana and kiwi, which had a high incidence of latex fruit syndrome, 18/55 of students experienced allergic experience in kiwi, followed by 3 bananas, one avocado.

Four students experienced allergic symptoms in daily rubber products (rubber band Hair bands, home rubber gloves, rubber balloons) and fruits and vegetables. These four people had oral allergy syndrome in kiwi, tomato, peach, papaya, mango and melon.

Table 1. Matching of the latex fruit syndrome and Natural rubber products in Japanese nursing students

STUDENTS ID	Natural Rubber products of daily use	Oral allergic symptoms to fruits and vegetables	History of allergic
A	Rubber bands Hair bands	Kiwifruit	Atopic dermatitis
B	Rubber bands Hair bands Balloons	Tomato	Contact dermatitis
C	Rubber bands Hair bands	Peach Papaya Mango Melon	Contact dermatitis
D	Household gloves	Melon	None

【Conclusion】

In Japanese guidelines, latex fruit syndrome is one of the LA risks. For female university students, kiwi was considered more frequent than chestnuts and bananas. It is difficult to assess LA risk by only food listed in latex fruit syndrome. However, it is important to carry out comprehensive preventive measures such as changing the material of use gloves and medical products, and examining skin prick tests and IgE antibody tests, as judged from the inquiry.